

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



281.9  
F76F6  
p. 2

11/43

# FOREIGN AGRICULTURE

October 22, 1973



## Soviet Sunflower Crop Under the Weather

Foreign  
Agricultural  
Service  
U.S. DEPARTMENT  
OF AGRICULTURE

**In this issue:**

- 2 **USSR Sunflower Crop Continues Under the Weather**  
By George E. Wanamaker
- 5 **Denmark Moves To Up Quality of Growing Beef Industry**  
By Harlan J. Dirks
- 6 **Greece Unveils 5-Year Plan To Revitalize Past Farm Goals**  
By James C. Frink
- 9 **Pyrethrum Prospects Brighten in Today's Ecology-Minded World**  
By Rex Dull
- 11 **South Africa's Wine Industry Has Potential for Expansion**  
By William R. Hatch
- 13 **Crops and Markets**

**This week's cover:**

Wheat threshing machines like this travel to Greek villages where grain harvest is gathered in one place to await thresher's arrival. See article on page 6.

Earl L. Butz, Secretary of Agriculture

Carroll G. Brunthaver, Assistant Secretary for International Affairs and Commodity Programs

David L. Hume, Administrator, Foreign Agricultural Service

**Editorial Staff:**

Kay Owsley Patterson, Editor  
Patricia O. MacPherson, Mary Frances Owsley, Marcellus P. Murphy, Isabel A. Smith.

**Advisory Board:**

Kenneth F. McDaniel, Chairman;  
Gordon O. Fraser, Elmer W. Hallowell, William Horbaly, J. Don Looper, Larry B. Marton, Richard C. McArdle, Wayne W. Sharp.

Use of funds for printing *Foreign Agriculture* has been approved by the Director of the Bureau of the Budget (May 1, 1969). Yearly subscription rate: \$20.00 domestic, \$25.00 foreign; single copies 45 cents. Order from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Contents of this magazine may be reprinted freely. Use of commercial and trade names does not imply approval or constitute endorsement by USDA or Foreign Agricultural Service.

# USSR Sunflower Crop Continues Under the Weather

By GEORGE E. WANAMAKER  
*Fats and Oils Division  
Foreign Agricultural Service*

**D**ESPITE PROSPECTS of a good sunflowerseed harvest, the Soviet Union may face a 1-million-ton oilseed "deficit" in 1973-74, with an as-yet undetermined portion of protein and vegetable oil needs again likely to be filled by purchases of U.S. soybeans or other fats and oils on world markets.

In the final weeks of the September harvest, weather conditions throughout USSR sunflower-growing areas continued to dominate the critical final outturn of the harvest, with high interest focused on Moscow's morning weather and crop reports, in hopes that rains would hold off during harvest.

An excess of moisture in extended areas of the European USSR during July and August prevented proper seed development in sunflower heads, thus lowering yield. Continued rain during September also delayed harvesting, endangered crop prospects, and lowered oil quality.

With the shortage of drying equipment, many Soviet farms appeared to be delaying sunflower harvesting in the hope dry, sunny weather will assist in lowering the moisture content.

Consequently, by September 24, 1973, only about 35 percent of the total area sown to sunflowers had been harvested, in contrast to last season, when 79 percent of the sunflower area had been harvested by September 25.

While Soviet officials continued to express expectations of a 6-million-ton gross sunflowerseed harvest, current conditions appear to favor a somewhat lower figure—possibly 5.8 million tons. This output, however, would still be well above last season's relatively poor 5-million-ton crop. But on a net basis—after adjustment for losses—the crop could equal only 5.3 million tons—still best since 1970.

*This article is based largely on the author's observations during an extensive tour by car of major Soviet oilseed areas on August 21-September 6, 1973. He was accompanied by other U.S. and Canadian agricultural officers.*

In the 1972-73 season, when both sunflower and soybean harvests were below normal levels, Soviet oil and meal needs were partially met by a 1-million-ton purchase of U.S. soybeans. Of the total purchase, 975,000 tons were imported by July 1973 and the remaining 25,000 tons is scheduled for delivery in October-November 1973.

In contrast to U.S. consumption patterns, Soviet officials have affirmed that these purchases were made primarily to fill growing domestic oil requirements. Following crushing, oil-cake and meal are used to upgrade the protein content of livestock feeds in order to attain planned gains in livestock product output by 1975. Moreover, U.S. soybean imports will enable the USSR to maintain sunflower oil exports—an important foreign exchange earner—at current, rather low levels of about 400,000 tons.

Acreage sown to sunflowers this season may have approached 11.6 million acres, about the same as in 1972. Harvested area, however, may be higher than the 10.85 million acres last year, when a prolonged drought reduced the area harvested for seed.

**G**ROWING CONDITIONS for sunflowers in the Ukraine and Moldavia—top producing areas—have been particularly favorable this year. Heavy and prolonged rains, however, seriously delayed harvesting in important growing areas of the USSR, possibly again reducing area harvested for seed.

Although sunflower yields this year should be above those of 1972, the quality of the crop will still be somewhat below average. Seed shortages were evident and reserve stocks were drawn down to boost local supplies.

Area harvested for seed is likely to be below average, while areas harvested for silage may be above average. Sunflower acreage for silage is excluded from total reported sunflower area.

Moreover, heavy, untimely rains in many producing areas reduced the

number of seeds below the desired level of 1,000 per head. As of early September, the average moisture content of sunflowerseed harvested seemed to be much above desirable levels. Standard moisture content in sunflowerseed is 12 percent, but the 1973 crop may average close to 15 percent—a condition that will adversely affect the quantity and quality of the sunflower oil.

At the estimated 5.3-million-ton level,

net basis, and with procurements at 4.7 million tons, sunflowerseed supplies will still be some 800,000 tons below the Soviet plan. Considering reduced soybean production in recent years, USSR oilseed import requirements could approximate last season's high level. While purchase plans are never announced, substantial quantities of soybeans—probably from the United States—appear to be needed. Only 12,000 tons of

U.S. soybeans remained unprocessed by Soviet millers by early September.

Roughly, the minimum protein meal "deficit" is estimated at about 500,000 tons—the amount needed to bring 1973-74 oilcake supplies to the 1972-73 level. This need could be filled by a 650,000-ton soybean purchase. If national requirements are adjusted to include attainment of livestock production goals, the import "deficit" could be higher yet.



*Soviet combine discharges harvested sunflowerseed into tractor-drawn wagon, left. Underdeveloped sunflower heads (below left) caused by excessive rain were evident in many fields this season. Above, air drying of sunflowerseed on collective farm.*



Again roughly, Soviet vegetable oil import requirements in 1973-74 could approach 300,000 tons. Thus, a purchase of 650,000 tons (24 million bushels) of U.S. soybeans this season would provide only 115,000 tons of vegetable oil—still 185,000 tons below the calculated deficit. However, the Soviet Union may again be able to purchase butter from the European Community (EC), or a variety of other vegetable oils or animal fats on the world market, to satisfy this residual fat requirement.

CONSEQUENTLY, a decision to import U.S. soybeans is expected some time after the final outturn of the sunflowerseed crop—a critical determinant of import requirements—but probably still before the end of 1973.

In the Soviet Union, grain and soybean purchases are the responsibility of EXPORTKHLEB, an agency which acts in response to production plans of other organizations. Chief among these is the Ministry of Food Industry—responsible for oilseed processing, as well as overseeing production goals for vegetable oils and related products.

Thus, when shortfalls in production plan goals create a need for added imports of oilseeds, vegetable oils for processing, or for finished products, needs are transmitted to EXPORTKHLEB, which initiates specific purchases. The Ministry of Procurement—responsible for the production and distribution of mixed feeds—also influences decisions on imports of oilcakes and meals.

Owing to adverse weather factors and declining acreage, Soviet sunflower production prior to 1973 has generally eased downward since 1968. In 1972, sunflowerseed production fell to its lowest level since 1963, adding fuel to a growing vegetable oil and protein deficit. Additionally, soybeans—a less important oilseed crop than sunflowerseed in

the USSR—also fared badly in the 1972 season, with production amounting to about 260,000 tons—less than 50 percent of an average year's crop.

The reduced soybean harvests have created a substantial need for raw materials for Soviet crushing mills located in the Soviet Far East. Recent information indicates that some 300,000 tons of U.S. soybeans were diverted to the Soviet Far East to supply the four specialized soybean crushing plants in that region. In the remainder of the USSR, sunflowerseed factories were diverted, bimonthly, to processing soybeans.

Although imported U.S. soybeans have undoubtedly temporarily relieved the tight oil situation somewhat, it is interesting to note that Soviet consumption is still affected by decided regional preferences for specific oils. For example, soybean oil is preferred in the Soviet Far East and the Baltic Republics, cottonseed oils are produced and consumed in the Southern Republics, and sunflowerseed oil is widely used in the European USSR, especially in the Ukraine and Moldavia.

The 975,000 tons of soybeans imported from the United States in 1972-73 are estimated to have added almost 170,000 tons of oil and about 750,000 tons of protein meal to Soviet supplies. Even this amount of oil, however, is insufficient to meet growing Soviet fat requirements, as evidenced by the 200,000-ton purchase of butter from the EC, which is still being imported monthly.

An important factor in ascertaining Soviet oilseed import needs in future years will be the success of domestic production plans. At present, soybeans are cultivated on less than 2.5 million acres, essentially all in the Soviet Far East. To expand soybean acreage in this area would involve heavy expenditures for such projects as drainage and flood control—measures that do not

appear warranted in view of extremely low yields there—and which are not in the budget of the current 5-year plan.

Considering pressures to produce more suitable protein to improve mixed feed rations, however, soybean cultivation could be expanded under irrigation in parts of the Ukraine and Moldavia during the 1976-80 period.

Through 1975, the final year of the current 5-year plan, the Soviet Union is likely to permit a further, small expansion in sunflower acreage. Generally, however, efforts will focus on increasing yields through better cultivation and harvesting practices, rather than augmenting acreage.

Research is being carried out by the All Union Scientific Institute of Oilseed Crops (UNIIMK) at Krasnodar and its branches to develop new and improved seed varieties for oilseed crops, with emphasis on shorter maturing sunflowerseed varieties. Some attention continues to be directed at developing seeds with an increased oil content. The Institute estimates average oil content of USSR sunflowers now approaches 52 percent, with some areas such as Moldavia obtaining 55 percent.

ADDITIONALLY, seed multiplication is carefully controlled by the Institute, which annually provides enough seed to farms to plant seed plots. Farmers then harvest these plots to provide seed stock for their total sunflower area. According to the Institute, 20,000 plants should ideally be sown per hectare, with each flower head containing 1,000 seeds. For silage, 40,000 plants may be seeded.

The Soviet Ministry of Agriculture has indicated that the upper limit of area suitable for sunflower planting is slightly less than 12 million acres—about the same area as planted in 1970. If yields can be increased by 15 percent over the 1970 level, the gross sunflowerseed harvest by 1975 could total 6.5 million tons, with a net harvest of about 6 million tons—still well below the 7.4-million-ton (gross basis) plan level.

From the net harvest, however, some 500,000 to 600,000 tons would continue to be “unprocureable” and will be used locally. Thus, assuming these projected acreages and yields, the “deficit” between planned procurement and probable availability would approximate 500,000 tons. In terms of oil, the projected 1975 “deficit” exceeds the oil content of 1 million tons of soybeans.

USSR SUNFLOWER ACREAGE, YIELDS, AND PRODUCTION, 1970-73, AND SUNFLOWERSEED PROCUREMENT PLANS, 1970-75

Item	1970	1971	1972	1973	1974	1975
Harvested area—						
1,000 acres . . . . .	11,834	11,115	10,858	11,120	( <sup>2</sup> )	( <sup>2</sup> )
Yield—						
pounds <sup>3</sup> . . . . .	1,053	1,040	941	1,050	( <sup>2</sup> )	( <sup>2</sup> )
Production—						
1,000 metric tons <sup>3</sup> . . . .	5,652	5,244	4,644	5,300	( <sup>2</sup> )	( <sup>2</sup> )
Procurement plan—						
1,000 metric tons <sup>3</sup> . . . .	4,613	5,285	5,410	5,540	5,690	5,900
Procurement, actual—						
1,000 metric tons <sup>3</sup> . . . .	4,613	4,356	3,752	4,700	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> Preliminary estimate. <sup>2</sup> Not available. <sup>3</sup> Estimated barn yields after adjustment for 8 percent dockage. <sup>4</sup> After adjustment for standard moisture content of 12 percent, the actual procurement figure may approximate only 4.6 million tons.

# Denmark Moves To Up Quality Of Growing Beef Industry

By HARLAN J. DIRKS  
Former U.S. Agricultural Attaché  
Copenhagen

**T**ODAY'S VASTLY heightened market opportunities have moved Denmark into action to improve the quality of its beef with better breeding, feeding, and production efficiency.

Danish pork is well known around the world for its high quality but this has not been the case for beef. The bulk of Danish beef has come from cows culled from milking herds. Calves not kept for herd replacement were mainly exported as veal. But the Danes hope to change this picture.

During many of the years that Denmark was cut off from the European Community (EC), returns from dairy farming were relatively low and there was a substantial reduction in cattle herds. Cattle numbers dropped from a peak of 3.6 million head in 1961 to 2.7 million head in 1971. Beginning in 1972, a fundamental change began to take place. With EC membership pending, and the outlook for much higher and more stable beef prices, cattle breeders for the first time in a decade started to build herds. The April 1973 census showed a total of 2,988,000 head, an increase of 10 percent in less than 2 years, while the number of dairy cows only increased by 7 percent. Dairy cow numbers have thus declined from 40.6 percent of the total in 1971 to 39.6 percent in the April 1973 census.

Interest in beef production was stimulated further by the fact that beef prices have increased 100 percent in the past year and a half. This has given rise to an increase in the share of earnings from the sales of beef relative to milk. Beef production in Denmark is still largely a complementary enterprise to the dairy industry. In 1971-72, about 30 percent of the earnings stemmed from meat sales, but in 1972-73 this jumped to 40 percent. Beef production



*Egtved breeding station where bull calves are progeny tested for carcass quality.*

(including live animals exported for slaughter and edible offals) in 1972 dropped 17 percent as a result of farmers holding animals off the market for herd expansion.

**Quality improvement.** In the mid-1960's, it became clear that a substantial amount of work was needed to improve the quality and efficiency of Danish beef production. A central cattle breeding station was opened at Egtved in 1967 for the purpose of progeny-testing bulls for meat production. Research results so far have shown that there is a great deal of difference in the ability of individual bulls to transmit growing ability, carcass confirmation, and quality. Only the best 50 percent of the bulls tested can pass the high requirements set up at the station.

The superior bulls from the station are placed in the breed associations and the semen made available to farmers. Semen from the Danish dual-purpose breeds (Danish Reds and Black and Whites), as well as from the best known European beef breeds, is made available either for line or crossbreeding, mostly on the Danish dairy herds. Some interest is developing in specialized beef herds, but the numbers are still relatively low and no large expansion is in sight due to limited grazing areas. However, the Danish dual-purpose dairy cattle make excellent beef when grain fed and properly processed and aged.

One of the biggest problems Denmark has had in its quality improvement program for beef has been the lack of official grade standards. With no

well-defined set of commercial grades, it has been very difficult to reflect consumer choices back to the producer through the market system. Supermarket operators have been unable to specify a quality grade and get the volume of "graded" beef needed to do a good job of cutting and prepackaging beef at the retail level.

**D**ENMARK DID DEVISE and use a set of working grades in order to apply their quality incentive scheme, which was designed to encourage the production of higher quality beef. About 50 percent of the young beef cattle slaughtered in Denmark were evaluated under this voluntary system. Small payments (on a graduated scale) were made for young bull calves making the higher grades, grade B+, A-, A, A+, and A-1. There is no firm evidence that the program had much effect as the highest premiums were paid for the lighter baby beef carcasses. This system was dropped on March 1, 1973, after only 2 years of operation. It is expected now that Denmark will wait and adopt the official EC grading system (German system).

**Feedlot production.** In addition to an expected increase in total cattle numbers, the Danes are banking on two other means of increasing beef output. One method is calving heifers at a younger age through a program of intensive rearing of heifer calves, and the other is increasing slaughter weights in feedlots.

The U.S. Feed Grains Council and

FAS (in cooperation with the Danish National Institute of Animal Science) have been investigating the possibilities of calving heifers reared on high grain diets at 18 months, instead of the normal 24 to 30 months. Work done so far has shown that calving at this early age is possible and that it can result in a greater number of calves being born during the dam's reproductive life, as well as cut costs. If generally adopted, the intensive heifer rearing program could help relieve the calf shortage.

In the pre-EC days, returns were too low to encourage the feeding of young cattle to heavier weights. EC rules permitted the levy-free entry of light-weight (baby-beef) carcasses of 287 pounds or less, and Italy was Denmark's prime market. This situation has now changed, and the average carcass weight of the so-called "baby beef" today is 397 pounds. Some better-quality carcasses go up to 660 pounds. Experts see a steady rise in the average carcass weight and the development of feedlot beef. It has been recommended that a demonstration feedlot be established in Denmark for official experimental work.

Most of the cattle feeding in Denmark today is done in small farm units, but this is slowly changing. Some larger, private feedlots can be found with capacity up to 300 head. One large chain-store is now contracting with several farmers for the production of heavy, grain-fed beef cattle. So far, the store has been unable to get sufficient supplies to merchandise this beef on a year-round basis. A group of Danish Hereford breeders recently asked one of the largest farm supply firms in Denmark to draw up plans for a custom feedlot with a capacity of 1,200 head and an annual output of 2,000 head.

Rations for fattening beef have traditionally depended heavily on root crops and grass silage. More recently, however, grains have become a more important part of the ration as fed-beef prices have been increasing more rapidly than grain. The ratio between the price of slaughter cattle and feed costs (ready-mixed cereal-base feed with 15 percent protein) has increased from 3.3 in the 1950's to 6.1 in March 1973.

To further stimulate interest in high-level cereal feeding, the U.S. Feed Grains Council and FAS have set up a feeding demonstration in Denmark which will compare high-level corn feeding to low-level barley diets under feedlot conditions. The first animals

# Greece Unveils 5-Year Plan To Revitalize Past Farm Goals

By JAMES C. FRINK  
*U.S. Agricultural Attaché  
Athens*

**G**REEK AGRICULTURE, currently in the midst of one of its more difficult years, is to benefit from a new 5-year plan released this past July.

Essentially, the plan revitalizes some long-standing goals, but promises more intensive efforts than in the past toward their realization. Among these goals are increased farmer productivity and income, self-sufficiency in agricultural production, expanded exports, and harmonization of farm policies with those of the European Community (EC).

Measures put forward to accomplish these objectives include: Accelerating the rate of irrigating new lands and consolidating individual landholdings; switching to high-income crops; expanding "group farming;" establishing transportation and marketing facilities for agricultural products, and reorganizing and improving agricultural cooperatives and expanding their use.

Perhaps the easiest of the measures to implement is the stepping up of irrigation. Currently, about 20 percent of the total arable land is irrigated, mostly from wells supplied by subsurface water, which are replenished annually by winter rains; about 1 percent of total arable land is currently being added each year toward a maximum irrigation potential of about one-third arable land. With this expansion, more high-income crops and livestock enterprises will be possible.

Speeding up the rate of land consolidation, on the other hand, will be among the more difficult undertakings, as is true in most parts of the world. Differences in land qualities and values, community and farmer indifference and objections, and multiownership of holdings are but a few of the many inhibiting factors.

The need for consolidation is indicated by the smallness and fragmentation of holdings. (The average farm size is 10 acres, divided into seven pieces of 1.5 acres each.)

Switching farmers to high-income enterprises is possible, but highly sophis-

ticated planners and administrators are needed to keep commodity production in the desired relative positions. The current cost-price squeeze is disrupting the desired relationships, and planners are unable to cope with the situation.

The rise in cost of farm labor, due largely to the rapid farmer exodus to more attractive industrial jobs and higher living standards, both within Greece and abroad, is perhaps the most important element. In addition, younger generation women, historically accounting for a significant share of the farm labor supply, are showing greater reluctance to toil in the fields.

One outgrowth of these changes is the growing expense of harvesting cotton. Most of the cotton is handpicked, a large part of which is done on a payment-in-kind basis. A few years ago, handpickers received 10 percent of the amount picked as their wage. For the last year or two, the rate has been 33 percent, and this year it is expected to rise to 50 percent. Prices farmers receive, including Government subsidies, have not kept pace.

**T**O ALLEVIATE such problems, the Government is subsidizing both the purchase and use of mechanical pickers. However, these still account for only a small share of the total cotton harvest.

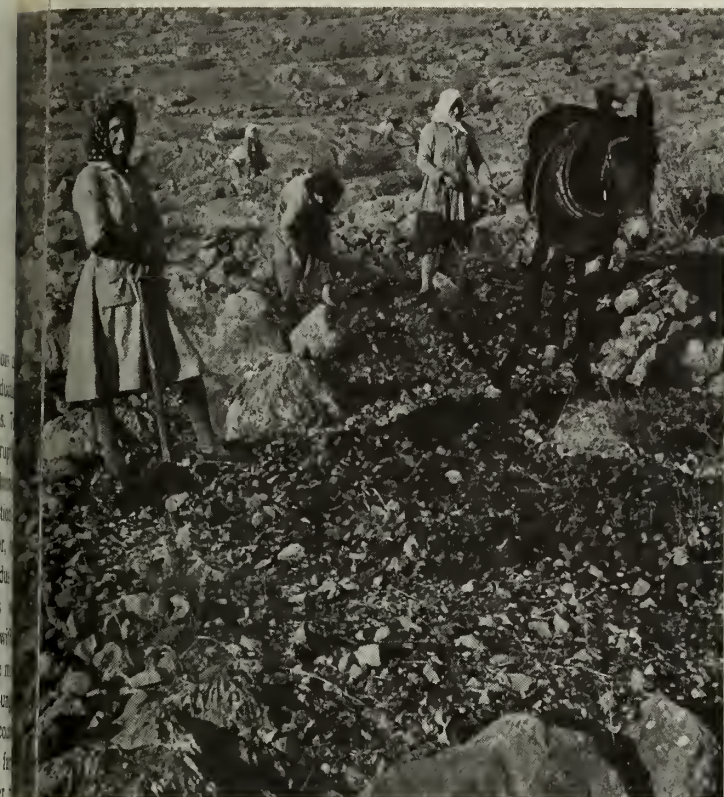
Another problem is that Greek farmers, concerned about general price inflation and the decreased value of the drachma (which is tied to the dollar) in relation to most European currencies and gold, have shown a tendency to hold onto their produce despite rising domestic prices. Particularly affected have been olive oil and grain.

Also detracting from production of so-called high-income crops at the moment is the instability of the Greek currency.

The new plan continues the encouragement that has recently been given to poultry, pork, and dairy production.

For instance, to eliminate imports of dairy products, which account for an

*Continued on page 16*



Greek peasants attempting to farm small plots between limestone rocks, left. Automatic gates on the primary canal of irrigation system in Macedonian Plain, above. Harvesting rich rice crops grown on irrigated land in Serres Valley, below. (Courtesy FAO)

important share of total agricultural purchases abroad, the Government last year approved establishment in Greece of a Swiss milk-processing facility. In line with this, a program has been launched to accumulate high-quality dairy cattle from overseas sources to be able to adequately meet the requirements of good-quality milk for the plant, now scheduled to initiate operations in 1976. The plant is expected to supply most of Greece's needs for milk and other dairy products.

One of the goals of the 5-year plan is to increase poultry and red meat production to 555,000 metric tons—about 50 percent above the present level—by 1977. But at the rate of increase of the last few years, this objective will not be realized.

The greatest opportunities for obtaining this goal lie with pork and poultry. The crash buildup of dairy cattle now underway will also contribute. However, beef breeds are not being emphasized owing to the shortage in Greece of good-quality grazing lands.

Group-farming, relatively new in Greece, is being promoted as a means of increasing productivity and lowering production costs.

Cotton units have been most successful for this type of farming thus far. The average unit incorporates growers with about 200 acres of cotton. Except





Gin press producing bales of cotton, a crop in new 5-year farm plan for Greece.

for tractors, which the growers supply themselves, the equipment such as mechanical pickers and sprayers, is owned by the Government (Hellenic Cotton Board) and leased to growers on a fee basis. About 18 cotton groups are now under operation.

Trials of such units in fruit production and marketing are reported to have been less satisfactory. Some crops, such as exportable oriental tobacco, where mechanization is difficult to impossible, are less likely candidates for group farming.

Agricultural cooperatives are to become increasingly important in Greece under the new plan, which provides the

means and authority for a faster and broader buildup of their activities, facilities, and responsibilities. This continues the long-important role of co-operatives in Greek agriculture, with their special ability to compensate for the smallness of farming units and the lack of modern marketing methods.

A major long-standing goal, continued in the new plan, is harmonization with the EC's Common Agricultural Policy (CAP). Some EC commodity standards, including grades, have been adopted, especially for commodities exported in substantial quantities to EC countries. However, progress otherwise has been almost nil.

Since modifications necessary to accomplish harmonization are quite substantial, it is essential that immediate and major efforts be initiated if the task is to be accomplished by the target date, which Greek officials indicate is 1984.

Greece's relationship with the EC as an associate member has had a rather ambivalent nature, with some trade problems on the one hand offset by generally greater access to the EC on the other.

**G**REECE'S PROBLEMS with the EC came into the spotlight last year when the country's bumper crop of good-quality peaches ran head on into EC embargoes and countervailing duties, the purpose of which was to protect sales of member countries. A year earlier, the EC tobacco CAP had placed Greek tobaccos in an unfavorable position in EC countries and threatened permanent damage to Greek production and trade. Similar problems have arisen with tomato paste and flour.

On the other hand, the preferential tariff rates afforded Greece by the EC and the insatiable demand there for Greek farm products are providing welcomed outlets for an important share of the country's farm production.

Development of a plan and its announcement by the Government indicates that emphasis is to be placed on its implementation. Now, Government planners must develop appropriate price relationships and mechanisms needed to ensure that they are reasonably well maintained.

The target for meat production, at 550,000 metric tons, is perhaps too optimistic. The 150,000-metric-ton goal for cotton lint, however, is only 5 percent above 1972 output and attainable.

## Greece To Triple '73-74 Grain Imports

Impressive gains in the livestock sector, combined with a grain harvest 5 percent below last season, could lead Greece to import 1 million tons of grain, mainly corn, in the 1973-74 marketing year. This amount is nearly triple last season's 341,000-ton level, and far exceeds the approximate 200,000 tons imported in the preceding 2 years.

In view of shorter world grain availability, Greece made purchases of food and feedgrains early for the 1973-74 season. In late June, Greece contracted for some 760,000 tons of U.S. corn. Early in August, 150,000 tons of U.S. wheat and 15,000 tons of Bulgarian wheat were purchased. Remaining grain purchases could include 100,000 tons of corn, 15,000 tons of wheat, and 100,000 tons of barley—probably from the United States.

Hot, dry winds in early May adversely affected Greece's 1973 grain harvest. Hardest hit was the wheat crop, now estimated to be 9 percent below 1972. Part of the drop, however, was caused by a 4.3-percent reduction in area, in spite of Government-increased support prices for the 1973 crop. Durum production, shortened by price disadvantage, dropped by 14 percent this season. Barley output also dipped slightly, despite expanded acreage.

Corn output continued to spiral, however, continuing the trend of recent years. Although area increased by only 3 percent, yields were sharply higher, owing to expanded irrigation, new hybrid varieties, and better cultivation practices of pest control and fertilization.

Greece's stronger demand for grain is a direct result of livestock industry expansion, bolstered by various Government incentives. The grain component of feeds has soared in recent years, reacting to high protein meal and concentrate prices and Government subsidies on grain sold livestock producers.

Current Government policies and programs, announced in early April 1973, provide a strong impetus to livestock expansion. The livestock development program calls for a rapid buildup of good quality dairy animals. Plans call for purchasing 10,500 bred dairy and beef heifers later this year.

Moreover, the Government has adopted a new program involving such incentives as exempting livestock raisers from income taxes, duty-free imports of breeding animals, loans to 80 percent of capital requirements, and feed price concessions.

The rise in feedgrain consumption has been accompanied by comparable increases in meal utilization, largely filled by imports. At present, Greece is building a soybean crushing plant and expects to crush 70,000 tons of soybeans by early 1974.

—By JAMES LOPES, ERS

# Pyrethrum Prospects Brighten in Today's Ecology-Minded World

By REX DULL

*Sugar and Tropical Products Division  
Foreign Agricultural Service*

**P**YRETHRUM, nature's insecticide, has a considerably brighter outlook with the increasing restrictions imposed on high-residual chemical insecticides in today's ecology-minded world. But pyrethrum's high cost, compared with chemical insecticides, remains the principal deterrent in expanding its use in commercial agriculture.

Although the United States is by far the largest importer and user of pyrethrum, taking nearly two-thirds of the volume that enters world trade, about 95 percent of this is consumed in home and garden products. Other major consumers are the United Kingdom, a few other Western European countries, and Japan.

Pyrethrum is derived from the dried flower heads of *Chrysanthemum cinerariaefolium* which contain an essence called pyrethrin. The daisy-like pyrethrum flower can be grown in both the tropics and in the temperate regions of the world; however, the critical pyrethrins content of the flowers may be practically nil unless the climate is suitable. The life-cycle of the plant is very largely dependent on a change in mean temperatures as a period of chilling is necessary to stimulate bud initiation. As a result, the plant can be grown successfully in the tropics only at high altitudes which provide the necessary low temperatures.

Despite the high cost of hand labor required in pyrethrum cultivation, the special qualities of this natural insecticide make it very desirable. Unlike many chemical and synthetic insecticides, pyrethrum does not have a long residual effect and is probably the least toxic to mammals of all insecticides currently in use. It can be safely used on fruits and vegetables prior to harvesting and marketing.

Although this natural insecticide has been used since the early 19th century, and reportedly by the Chinese nearly 2,000 years ago, only a few isolated cases of insect resistance have been recorded. With many organic synthetics,

insect resistance has appeared after only a few years.

East Africa is now the principal area of pyrethrum production, replacing Yugoslavia and Japan as major suppliers since World War II. Kenya accounts for about two-thirds of world production and Tanzania for about one-fourth. Small amounts also are produced in Rwanda and Zaire.

Ecuador is the world's third largest producer, while Brazil and Peru produce only small quantities. But New Guinea, a relative newcomer in pyrethrum production, has the climatic conditions and land area to further expand production.

Although pyrethrum sales are now strong, the industry has had its period of crises. Demand for pyrethrum dropped sharply after World War II with the eventual development of DDT. But the industry managed to survive, aided by the invention of the aerosol pressurized dispenser and the U.S. discovery of a number of synergists, or chemical "boosters," which when added to pyrethrum, increase its effectiveness and also reduce its cost.

**W**HEN THE PYRETHRUM industry was dealt another serious blow a few years ago when a British firm announced the development of a synthetic product which gives results similar to the natural product and at nearly one-third the cost of natural pyrethrum. This synthetic reportedly has the same low toxicity to mammals and the fast insect "knockdown" as natural pyrethrum. As a result, pyrethrum producers currently are striving to raise the pyrethrins content and yield of the flowers to maintain low production costs so that the natural product can remain competitive with the synthetics in the world market.

To encourage higher yielding pyrethrum production on small farms, the Kenyan Government, at considerable cost, has changed its subsidy policy. Formerly a flat rate was paid to farmers

for their flowers, but now a four-tier scheme is used with a bonus paid for high-content flowers of over 2.2 percent pyrethrins, and a penalty for low content flowers of less than 1.3 percent pyrethrins. New high yielding varieties of the plant have been developed and the Government is working to get the seeds distributed to growers.

Reflecting favorable weather and the Government's renewed efforts to expand production to meet the recent upsurge in demand, Kenya produced a record crop of 31.8 million pounds of dried pyrethrum flowers during the 1971-72



*Field of daisy-like pyrethrum flowers in Kenya. This crop can be grown in both tropical and temperate regions.*

(Oct.-Sept.) season, up 46 percent over the 1970-71 harvest of 21.8 million. The pyrethrins content of the 1971-72 crop was also good, averaging 1.35 percent, compared with 1.31 in 1970-71 and 1.25 percent for the 1969-70 pyrethrum crop.

Kenya's pyrethrum exports also were up considerably last year. Exports of extract totaled a record 1.1 million pounds valued at US\$530 million, and dried flower exports amounted to a near-record 6.3 million pounds valued at US\$112.8 million.

Kenya officials anticipate a further increase in world pyrethrum consumption during 1973 after enjoying a good sales year in 1972. The Government had hoped that production would be even higher this year, as farmers continue to utilize high yielding plants and improved cultivation practices. However, weather conditions have not been cooperative, as production returns for the first 9 months of the 1972-73 season have totaled only 17.7 million pounds of dried flowers, down 28 percent from the corresponding period a year earlier when 24.7 million pounds of dried flowers were harvested.

**E**CUADOR ALSO has been experiencing problems within its pyrethrum industry. After peaking in 1965 at about 5 million pounds, Ecuador's pyrethrum crops have been steadily trending downward, reflecting lower replantings and labor problems. Production in 1972 totaled only 1.4 million pounds, down 26 percent from the small 1971 harvest of 1.9 million.

However, Ecuador is striving to maintain its position as the world's third largest pyrethrum producer by encouraging producers to replant improved varieties yielding a higher pyrethrins content than the African average of 1.3 to 1.4 percent. New planting material with an average yield potential of 2 percent are to be distributed to growers next year. However, about 3 years are required for the plants to reach maximum yields and the results from this program to increase yields will not be felt immediately.

Because of increasing demand for pyrethrum, prices have been trending upward. Prices to Ecuadorean farmers in 1964 were about \$700 per metric ton (dry-flower basis), increasing to \$800 by 1970. Currently growers are being paid about \$950 per ton.

Ecuador's export sales of pyrethrum

totaled about \$540,000 in 1972, down from \$950,000 during the previous year, and considerably below the record \$1.9 million in 1965.

Reflecting the strong demand for pyrethrum products, U.S. imports of pyrethrum totaled a record \$8.7 million in 1972, up 45 percent over 1971 imports of \$6 million. Almost all U.S. pyrethrum imports are now in extract form rather than the dried flowers, as the extract is more easily transported and is sold at a standardized pyrethrins content.

Thus the preference for shipping extract has almost eliminated imports of the flowers. U.S. imports of pyrethrum flowers last year amounted to only \$49,000, compared with flower imports of \$1.6 million in 1961 and an average

of \$2.6 million during the 1950-54 period.

Although pyrethrum remains an expensive insecticide and cannot compete in price with most synthetic insecticides, producers are still hopeful that the current upsurge in demand will continue. Certainly there are ecological advantages in favor of pyrethrum, as efforts are continuing to curtail the residual effects of chemical and synthetic insecticides in the soil, water, and mammals.

Producers will have to maintain low production costs and increase yields, as well as seek new uses for pyrethrum in order to remain competitive with the vast assortment of chemical and synthetic insecticides available to consumers today.

#### U.S. IMPORTS OF PYRETHRUM, 1950-72

Year	Flowers		Extract	
	1,000 lb.	\$1,000	1,000 lb.	\$1,000
1950-54 (avg.) . .	7,320	2,605	57	120
1958 . . . . .	4,706	1,635	253	2,159
1959 . . . . .	993	322	552	4,794
1960 . . . . .	1,256	459	577	5,419
1961 . . . . .	4,116	1,606	514	4,777
1962 . . . . .	2,059	772	445	4,006
1963 . . . . .	1,646	407	527	4,707
1964 . . . . .	1,355	326	590	4,910
1965 . . . . .	551	154	663	5,838
1966 . . . . .	924	296	846	7,292
1967 . . . . .	1,852	702	635	6,124
1968 . . . . .	274	88	702	7,154
1969 . . . . .	469	143	728	6,409
1970 . . . . .	181	58	660	4,986
1971 . . . . .	158	12	798	5,982
1972 . . . . .	108	49	850	8,655

#### APPROXIMATE WORLD PRODUCTION OF PYRETHRUM FLOWERS (DRY BASIS) BY MAJOR EXPORTING COUNTRIES, 1955-72 [In millions of pounds]

Year	Kenya	Tanzania	Ecuador	Rwanda	Zaire (Congo)	Estimated world total
1955 . . . . .	<sup>1</sup> 7.8	1.4	0.2	<sup>6</sup> 2.5	2.2	15
1956 . . . . .	<sup>1</sup> 7.7	1.7	.2	2.6	2.1	15
1957 . . . . .	<sup>1</sup> 8.7	1.7	.2	<sup>6</sup> 2.0	1.9	15
1958 . . . . .	<sup>1</sup> 10.1	1.4	.5	1.7	1.9	17
1959 . . . . .	<sup>2</sup> 10.8	1.7	1.3	1.5	2.5	18
1960 . . . . .	<sup>3</sup> 14.6	2.3	1.0	1.7	1.3	21
1961 . . . . .	<sup>3</sup> 20.5	2.9	1.1	.9	.4	26
1962 . . . . .	<sup>3</sup> 24.1	4.2	1.2	.9	.5	31
1963 . . . . .	<sup>3</sup> 18.8	5.0	2.5	.5	.5	28
1964 . . . . .	<sup>3</sup> 11.6	5.1	3.8	.8	1.1	23
1965 . . . . .	<sup>4</sup> 13.8	8.1	5.3	1.0	.5	29
1966 . . . . .	<sup>5</sup> 17.4	13.2	4.0	.9	1.1	37
1967 . . . . .	<sup>5</sup> 23.6	14.8	4.1	1.0	1.1	45
1968 . . . . .	<sup>5</sup> 24.8	10.6	4.2	.9	.5	42
1969 . . . . .	<sup>5</sup> 16.4	8.4	3.8	.9	.6	30
1970 . . . . .	<sup>5</sup> 13.2	5.2	2.9	1.2	.6	23
1971 . . . . .	<sup>5</sup> 21.8	8.2	1.9	1.9	.7	35
1972 . . . . .	<sup>5</sup> 31.8	<sup>6</sup> 11.0	1.4	<sup>6</sup> 2.0	.9	47

<sup>1</sup> Year ending March 31. <sup>2</sup> April 1958 through June 1959. <sup>3</sup> Year ending June 30. <sup>4</sup> July 1964 through September 1965. <sup>5</sup> Year ending September 30. <sup>6</sup> Estimated.

# South Africa's Wine Industry Has Potential for Expansion

By WILLIAM R. HATCH  
U.S. Agricultural Attaché  
Pretoria

THE SOUTH AFRICAN wine industry is growing and shows promise of more expansion in the future. White wines have been by far the principal wines both consumed and produced in South Africa, but a recent increased demand for red wines has developed. By 1970, South Africa ranked twentieth among wine consuming nations of the world.

Value of wines, as well as consumption, has increased substantially since 1951 as the result of increased size of crops, improved quality of grapes, and generally higher prices, both on the local and on the export markets. However, on a value basis, less than 10 percent of the crop is exported, with the United Kingdom taking over 40 percent of total exports.

With the entry of this major market into the European Community (EC), a new program has been started this year to bring labeling requirements for South African wines up to EC standards. Basically, this amounts to a system of names of origin for South African wines.

This program offers great benefits for both the producer and the consumer. For the producer it means that his geographical name will be protected, that he virtually acquires a brand name without cost and probably even greater protection, and that should a particular product gain recognition for quality, he may receive the appropriate premium for it. For the consumer, on the other hand, this means that he will get exactly what he asks for regarding origin, cultivar (cultivated variety), vintage year, and quality guarantee.

Most South African wines are produced in local cooperatives or by individuals and then sold either directly by the producers or through the Cooperative Wine Growers Association (KWV). The remainder is taken to the large KWV cellars at Paarl, where it is matured and possibly blended or further processed. KWV also buys some grapes directly for the production of a small quantity of especially fine wines.

The percentage of wines kept for

"good wines" (a name generally applied to all fortified or unfortified wines for direct consumption) varies depending upon the general quality of the grapes for the year and the anticipated demand. In recent years it has ranged from 27.8 percent in 1956 to 60.7 percent in 1970. The remaining wines are used for distilling to provide additional

*Right, harvesting wine grapes in Cape Province. Below, transferring wine from the local cellars to KWV cooperative at Paarl for further processing. Most South African wines are produced in local cooperatives or by individuals. Bottom, irrigating vineyard in Cape Province.*





Hillside vineyards in the Cape Province of South Africa, the heart of the country's wine industry.

alcohol for fortifying other wines and for other uses.

Production has increased substantially in the last 20 years, as indicated by the two most recent quota increases—50 percent in 1964 and 60 percent in 1970. However, the 1973 crop is expected to be down about 10 percent from the record crop of grapes harvested in 1972 due to serious drought conditions in some areas.

South Africa's wine industry is located in the southern part of the country, principally in the coastal and Little Karoo regions of the Cape Province. The wine industry is closely related to the table grape and raisin industry, all of which compete for grapes. Grape growers who have wine quotas value them, however, and try to fill them regularly.

The first wine was produced from "Cape grapes" in 1659, and production increased quite rapidly with the arrival of the French settlers in 1688. By 1711, the quality of South African wines was well recognized, and a brisk export trade developed with Britain in the early 19th century. However, this trade collapsed in 1861 due to a change in British tariffs.

South African grape producers faced total ruin in 1885 when a vine disease occurred in the Cape vineyards, which was averted only by importing American disease-resistant rootstock. Produc-

tion with these new stocks then increased beyond demand causing prices to dip sharply.

In 1924, the South African Government passed the Wine and Spirits Control Act under which the KWV was formed. This association fixes the annual minimum price of distilling wine and the amount of wine to be sold, which has resulted in a more organized

industry with a sound base. Amended in 1940, the Act now provides for fixing the price for good wines sold by producers, and empowers the KWV to limit the production of wine alcohol in the Cape.

While the general organization, research, and promotion of the local wine industry was taking place, the demand increased both locally and abroad. For example, the first containerized shipment of South African wines arrived in the United States recently from Cape Town for distribution to the northeastern section of the country. This initial shipment of six 20-foot containers includes seven red and white table wine varieties as well as rosé.

As a result quotas were increased, which has brought about additional plantings within areas already involved in wine grape production and expansion into new areas, such as the Douglas area in the northern Cape which promises to become an important area due to irrigation from the Orange River.

By 1968, about 255,000 acres were planted to grapes for wine and for table and raisin grapes by growers holding wine quotas. In addition, there are a substantial number of grape growers who do not have wine quotas. The 1970 quota increase has expanded not only intake from quota holders, but has given new quotas in old and new areas, probably increasing plantings by close to 100,000 acres.

#### REPUBLIC OF SOUTH AFRICA: WINE EXPORTS BY COUNTRY OF DESTINATION, 1971

Country of destination	Value of wines exported	Percentage of total exports
	U.S. dollars	Percent
United Kingdom .....	2,236,137	41.5
Canada .....	1,599,859	29.7
Scandinavia and Finland .....	170,952	3.2
Other European countries .....	165,620	3.1
All other countries .....	1,215,249	22.5

#### REPUBLIC OF SOUTH AFRICA: VALUE OF WINE PRODUCTION AND VALUE AND QUANTITY OF EXPORTS, 1961-71

Year	Total crop value	Value of exports	Quantity of exports	
			Wine	Brandy
1961 .....	21.5	5.4	4,809,624	490,582
1962 .....	23.8	5.0	4,031,650	573,764
1963 .....	26.8	5.5	4,658,093	507,870
1964 .....	29.4	6.2	5,070,353	464,454
1965 .....	36.2	6.8	4,821,258	550,736
1966 .....	35.7	5.5	3,811,272	420,072
1967 .....	38.1	5.1	3,466,173	410,377
1968 .....	43.7	5.7	3,973,399	473,489
1969 .....	43.9	5.0	3,408,784	473,067
1970 .....	43.6	4.6	2,846,960	576,229
1971 .....	67.0	5.3	3,259,364	526,695

# CROPS AND MARKETS

## GRAINS, FEEDS, PULSES, AND SEEDS

### Rotterdam Grain Prices and Levies

Current offer prices for imported grain at Rotterdam, the Netherlands, compared with a week earlier and a year ago:

Item	Oct. 16	Change from previous week	A year ago
	<i>Dol. per bu.</i>	<i>Cents per bu.</i>	<i>Dol. per bu.</i>
Wheat:			
Canadian No. 1 CWR-14..	6.23	+13	2.68
USSR SKS-14 .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Australian FAO <sup>2</sup> .....	( <sup>1</sup> )	( <sup>1</sup> )	2.62
U.S. No. 2 Dark Northern Spring:			
14 percent .....	5.51	-12	2.54
15 percent .....	( <sup>1</sup> )	( <sup>1</sup> )	2.66
U.S. No. 2 Hard Winter:			
12 percent .....	5.51	-19	2.49
No. 3 Hard Amber Durum..	7.62	-54	2.61
Argentine .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
U.S. No. 2 Soft Red Winter.	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Feedgrains:			
U.S. No. 3 Yellow corn ...	3.06	-10	1.64
Argentine Plate corn ....	3.53	- 9	2.03
U.S. No. 2 sorghum .....	3.18	- 2	1.75
Argentine-Granifero sorghum .....	3.20	- 7	1.75
U.S. No. 3 Feed barley ...	3.03	- 2	( <sup>1</sup> )
Soybeans: <sup>3</sup>			
U.S. No. 2 Yellow .....	7.08	+ 8	3.67
EC import levies:			
Wheat <sup>4</sup> .....	<sup>5</sup> 0	0	1.31
Corn <sup>6</sup> .....	<sup>5</sup> .35	+ 4	1.16
Sorghum <sup>6</sup> .....	<sup>5</sup> .21	+ 3	1.04

<sup>1</sup> Not quoted. <sup>2</sup> Basis c.i.f. Tilbury, England. <sup>3</sup> New crop.

<sup>4</sup> Durum has a separate levy. <sup>5</sup> Levies applying in original six EC member countries. Levies in U.K., Denmark, and Ireland are adjusted according to transitional arrangements. <sup>6</sup> Italian levies are 18 cents a bu. lower than those of other EC countries.

Note: Price basis 30- to 60-day delivery.

### USSR Grain Harvesting and Fall Seeding Coming to a Close

In October, the rate of grain harvesting and fall seeding in the Soviet Union decreases rapidly as harvesting and seeding nears completion. The slowdown in these fall field operations is sufficiently great that the Soviets usually discontinue reporting on harvesting progress some time during the first half of October, and on fall seeding and fall plowing progress during the second half of October.

As of October 8, 1973, a total of 284 million acres (96 percent of the planned area) of small grains had been cut, of which 97 percent (about 275 million acres) had been threshed. Thus, about 20 million acres or 7 percent of the total grain area (excluding corn) on collective and State farms

had not been harvested, including over 7 million acres lying in windrows waiting to be picked up and threshed. However, the 12 million acres which had not been cut by October 8 this year and the amount of grain in windrows were not greatly different from the norm of recent years.

During 1969-72, some 12-24 million acres of small grain had not been cut when reporting on harvesting progress was stopped and usually several million acres remained in windrows. Part of the difference between total grain area and the total area cut is probably due to some of the grain being harvested as silage or green feed rather than as grain and to some of it being abandoned.

The area seeded to grain as of October 8, 1973, totaled 79 million acres, 93 percent of the total area planned for fall-sown grain this year. The fall-sown area is about equal to the areas sown by the same dates in 1968-71, suggesting about normal progress, but over a third more than on this date in 1972 when only about 80 percent of the fall-crop planned area was sown. Given normal progress during the second and third weeks of October, the 1973 fall-sown area would equal the planned level of 84-86 million acres. Soil moisture has been better than normal in most of the major winter grain areas.

Fall plowing this year is lagging somewhat, probably because of high levels of soil moisture over large areas. As of October 8, 1973, a total of 170 million acres (63 percent of the planned area) had been plowed. This is about 12-24 million acres less than plowed by the same dates in 1970-72 but a little more than in 1969. More than 32 million acres were plowed during the first week of October this year, about a fourth more than the average for that week in 1969-72. Plowing normally continues at a rate of 12-24 million acres per week through October.

### Canada and Australia Sign Wheat Deals with People's Republic of China

Canada and Australia have reported sales to the People's Republic of China of over 9 million tons of wheat.

The Canadian sale for a minimum of 4.8 million long tons to a maximum of 6 million long tons over the next 3 years was signed in Peking on October 4 and announced in Canada the following afternoon.

The Canadian Wheat Board announced the first sales contract calls for shipment of 1 million tons to China during the January-June 1974 period. It is expected the second contract will be signed soon and provide for sale of a further 1 million long tons to be delivered between July and December 1974.

The Australian sale reportedly calls for shipments of between 4.5 million and 4.8 million tons of wheat, also over a 3-year period. The estimated value of the agreement is US\$450 million. Under a previous agreement signed in September 1972, Australia agreed to deliver 1 million tons of wheat to the PRC during calendar 1973. The Australian announcement followed Canada's by several days.

The Canadian and Australian sales are being made in the face of a PRC 1973 grain harvest reportedly announced by the Agricultural Bureau of the PRC's Ministry of Agriculture and Forestry and said to be larger than the 1971 record crop of 250 million tons.

The Government spokesman also said that food supplies in the PRC were more than sufficient to support its population.

## **LIVESTOCK AND MEAT PRODUCTS**

### **1973 Meat-Import Estimate Set at 1.4 Billion Pounds**

An estimated 1.4 billion pounds of meat will be imported into the United States in 1973, according to the fourth quarterly estimate issued by the U.S. Department of Agriculture.

Each quarter, USDA announces the amount of meat expected to be imported during the entire year under the Meat Import Law. The law covers beef, veal, mutton, and goat in fresh, chilled, or frozen form. It does not cover canned meats.

Three months ago total meat imports expected in 1973 were estimated at 1.45 billion pounds. The current estimate, even though reduced by 50 million pounds, is at a record level and about 5 percent larger than 1972 imports.

### **Dominican Republic Lifts Meat And Livestock Export Ban**

The Dominican Center for the Promotion of Exports (CEDOPEX) has okayed resumption of beef exports after a 70-day ban.

CEDOPEX estimates the Dominican cattle population at approximately 1,972,000 head, of which 13 to 15 percent are available for slaughter. Based on these data, there should be approximately 16 million pounds of beef for export within the next 8 months. Legally, only male animals over 825 pounds and unproductive females may be slaughtered.

The average price for boneless beef exported to the U.S. market is US\$1.04 per pound, according to CEDOPEX.

### **Venezuela Gets Bank Loan To Fight Livestock Diseases**

The Inter-American Development Bank recently approved a loan equivalent to \$10.6 million, to combat foot-and-mouth disease and brucellosis in Venezuela.

The loan is the seventh by the Bank since it embarked on a campaign in 1968 to help member countries in South America eliminate foot-and-mouth disease from the continent. The Bank has previously made loans for similar efforts in Argentina, Brazil, Chile, Colombia, Paraguay, and Peru.

Total cost of the Venezuelan project is \$29.8 million, of which the Development Bank will provide 35.5 percent and the Ministry of Agriculture and Livestock the balance.

### **Canada Lifts Some Controls On Livestock, Reimposes Others**

Effective September 15, beef, pork, and livestock can be exported freely from Canada to any country except Rhodesia under two new general export permits. This action will remove requirements for exporters to submit individual applications to Ottawa to export pork, beef, and livestock, put under export control August 13, 1973.

In another action, Canada has reimposed duties on imports of live cattle and beef effective September 22. Duties had been suspended for 1 year starting February 20, 1973, but because of the heavy movement of U.S. slaughter cattle to Canada during the past 2 months, they have been reinstated.

About 15,400 head of U.S. cattle were imported into Canada in the month of August, and for the first 3 weeks of September imports are estimated at 26,000 head. This compares with weekly average imports of 400 head through July.

Total exports from February through September 1973 were 56,000 head, plus another 2,200 head on October 1 and 2.

The Canadian duties will be 1.5 cents per pound on live cattle and 3 cents per pound on fresh or frozen beef. Duties on live hog and fresh or frozen pork remain suspended.

## **FATS, OILS, AND OILSEEDS**

### **Six Major Producers Up Peanut Meal Output**

In 1974, peanut meal production from major producer-exporter countries (India, Nigeria, Senegal, Brazil, Argentina, and Sudan) is forecast to recover to 2.62 million metric tons—470,000 tons above the depressed 1973 volume but somewhat below the 2.80 million produced in 1972.

Based on past correlations between peanut meal production and exports by these countries, exports in 1974 could approximate 1.7 million tons, roughly 125,000 tons above the estimated 1972 volume.

### **Brazil Imposes Minimum Castor Oil Export Price**

On September 26, CACEX, the Foreign Trade Division of the Bank of Brazil, established a minimum export price for castor oil of \$950 per metric ton f.o.b. Brazilian ports. The export price for castor oil on the preceding day was quoted at \$825 per ton. Reportedly, CACEX is extending more liberal financing to Brazilian traders to enable them to hold stocks of oil until the world market price rises and to maintain domestic seed prices at current high levels.

CACEX apparently based its action on the current low volume of castor oil stocks in consuming and producing countries and the over \$1,000-per-ton price for castor oil's petroleum substitute.

Latest unofficial estimate of the 1973 Brazilian castor crop is 350,000 tons, or 85,000 tons above the poor 1972 harvest. Brazil normally accounts for about 60 percent of world exports of castor seed and oil, oil-equivalent basis.

## **SUGAR AND TROPICAL PRODUCTS**

### **World Cocoa Production Near 1972-73 Outturn**

The 1973-74 world cocoa bean crop is forecast at 1.42 million metric tons, up slightly from the 1972-73 harvest of 1.39 million, but well under the record 1971-72 crop of 1.57 million tons. Reflecting unusually dry weather conditions, African production is estimated at 977,000 tons, off nearly 6 percent from the 1972-73 harvest of 1,037,000 tons. However, improved weather in Latin America indicates that larger crops will be harvested in this region. The North American crop is

forecast at 91,700 tons, up 21 percent over a year earlier, and South American production is estimated to reach 308,600 tons, an increase of 27 percent over the 1972-73 outturn of 242,700.

Estimates for major producing countries in thousands of tons, with 1972-73 data in parentheses, are as follows: Ghana, 370 (420); Nigeria, 245 (264); Brazil, 210 (160); Ivory Coast, 180 (181); Cameroon, 115 (103); Ecuador, 55 (43); Dominican Republic, 39 (26); and Papua-New Guinea, 27 (22).

More information will appear in the October 31 issue of *World Agricultural Production and Trade*.

## Large USSR Sugarbeet Harvest is Reported

A large sugarbeet crop is now reportedly being harvested in the Soviet Union. By the end of September, it was estimated that some 26 percent, 2.3 million acres of a total area to be harvested of 8.6 million acres, had been dug. An 83-million-metric-ton harvest of sugarbeets is expected. An earlier article in *Pravda* stated that planned sugar production for calendar 1973 is 10 million tons (raw value). On a crop-year basis, planned production in 1973-74 is 9.6 million tons. This would not be a record Soviet sugarbeet crop but would be the largest since 1968-69.

In addition to higher prices for sugarbeets, new wage increases have recently been announced by the Soviet Government in an effort to encourage rapid completion of the harvest. Another decree spells out how the crop is to be harvested, transported, and processed. The USSR's daily processing capacity is to be increased about 4 percent during 1973 to 674,000 tons by the addition of three new mills and by expanding the capacity of existing mills.

Despite the harvest of a large 1973 crop, consumption in the USSR will be almost 1 million tons above expected production. However, the Soviet Union has already purchased about this amount from countries other than Cuba.

## Cameroon Increases Cocoa Producer Price

The Cameroon Government has set cocoa producer price for the October 1973-September 1974 crop year at the equivalent of 21 U.S. cents per pound for grade 1 cocoa beans. This represents an 11-percent increase over the 1972-73 grower price of 16 cents per pound.

# FRUIT, NUTS, AND VEGETABLES

## Dried Fruit Pack in South Africa Up, Down in Iran and Greece

South Africa's dried fruit pack is up slightly, while those in Greece and Iran show slight declines from last year.

**South Africa.** The dried fruit pack is estimated at 22,300 short tons, 6 percent above last year's.

Raisin output is about 16,400 tons, 21 percent higher than 1972's. Totals were: Dried peaches, 2,200 tons; dried apricots, 1,100 tons; dried prunes, 1,000 tons; currants, 600 tons; and other dried fruits, 1,000 tons.

**Iran.** Total production is estimated at 373,000 short tons, 5 percent less than the 1972 crop of 392,000 tons. All categories, except raisins, were smaller than last year's.

Date production is estimated at 314,000 tons, 5 percent below the 1972 crop of 331,000 tons. Raisin outturn is estimated at 50,000 tons, the same as last year's. New areas coming under grape cultivation in Shirāz and western Azerbaijan indicate a potential for larger raisin crops. Apricot output is estimated at 9,000 tons.

**Greece.** The 1973 dried fruit crop totals 176,000 short tons, 6 percent less than last year.

Extreme July temperatures reduced early prospects for bumper currant and raisin crops. Currant output is estimated at 91,000 tons, 13 percent above 1972's, but below average. Raisin outturn is estimated at 61,000 tons, 23 percent below last year's. Quality of both currants and raisins is reported to be good. Rains in some areas reportedly cut dried fig outturn, now estimated at 24,000 tons. Quality and sizing of the crop are reported to be good.

## Portuguese Dried Fig Crop Shows 100-Percent Rise

Favorable weather conditions in the Algarve area point to a larger 1973 Portuguese dried fig crop. Production is estimated at 7,700 short tons, over twice the short 1972 crop of 3,300 tons, but still below average. Labor continues in short supply in the Algarve area, and some trees have been reported uprooted to clear ground for other uses.

Exports are expected to approach more normal levels after a short 1972-73 season. The total is now estimated at 1,600 tons. Ten-month exports (September 1972-July 1973) were reported as 204 tons of figs and 1,227 tons of paste.

The United States is leading Portugal's market fig paste.

## Larger French Prune Crop Expected

Good pollination and generally favorable weather contributed to a larger 1973 French prune crop. Production is estimated at a record 19,800 short tons, 43 percent above the small 1972 crop of 13,800 tons. Fruit ripening was reported normal, average size good, but brix level was below a year ago.

French exports are small, totaling about 1,200 tons during 1972-73. Markets included the United States as well as regular European Community and Scandinavian destinations.

French imports were relatively high totaling 6,700 tons during the same period. The United States was the major supplier followed by Yugoslavia. French carry-in stocks are low and an above average import level is needed if they are to be replenished.

## Spain's Dried Fruit Production Up

Spain reports larger dried fruit production. The 1973 crop is estimated at 8,800 short tons, 47 percent above last year. All individual items shared in the increase except dried apricots, which were damaged by cold April and May weather.

Raisin production is estimated at 4,700 tons. Both the Malaga and Denia crops were good with only negligible insect or disease problems.

Dried fig production is estimated at 3,300 tons, almost twice the short 1972 crop.

Dried apricot production is estimated at 800 tons. Apricot quality is reported by trade sources as superb with a good proportion of large sizes and excellent maturity.



First Class

If you no longer wish to receive this publication, please check here ☐ and return this sheet, or addressed portion of envelope in which publication was mailed.

If your address should be changed ☐ PRINT or TYPE the new address, including ZIP CODE, and return the whole sheet to:

Foreign Agricultural Service, Rm. 5918  
U.S. Department of Agriculture  
Washington, D.C. 20250

FOREIGN AGRICULTURE

## DENMARK IMPROVES QUALITY OF GROWING BEEF INDUSTRY

Continued from page 6

from this demonstration will be slaughtered late in the summer of 1973. The meat will be tested, branded, and sold through one of the leading supermarket chains in Copenhagen as high-quality, corn-fed beef.

**No beef bonanza in sight.** Earlier studies forecast some substantial gains in Danish cattle numbers in the coming years (indicating strong increases in both milk and beef production), but more recently these estimates have been scaled down considerably. While EC membership does make the long-run outlook brighter, there is still the problem of getting sufficient farm labor and the necessary capital. Then, too, the change from dairy to meat cattle is not an ideal solution for Denmark, because it would require a great expansion in pasture land which is just not available. Therefore, the dual-purpose Danish dairy breeds will continue to be the most important cattle in Denmark.

The newly adopted EC scheme granting premiums for the production of meat cattle could be an important factor in boosting beef output in Denmark. To qualify, a farmer must give up all sales of milk for a period of 4 years. The amount of the premium is approximately US\$9 (7.5 units of account) per 220 pounds of milk delivered in the previous 12-month period. In Denmark, a breeder must have at least 15 cows in his herd, and he must either replace, or cross, at least 80 percent of the female stock with animals of a recognized beef breed. Denmark can decide which

breeds it considers best for meat production and also if herds of less than 15 head (but minimum of 11) can qualify under certain conditions.

The demand for beef in the EC is expected to remain strong all during the 1970's. A deficit of 700,000 metric tons annually is forecast for the next several years. Denmark plans to capitalize on this market as exports normally equal about half the total output. There is virtually no chance that the EC beef requirements will be met by 1980.

Farmer optimism in Denmark is evident by the strong increase in the construction of cattle barns in the past year. Cattle numbers are forecast to increase about 5 percent in 1973, the same as in 1972. Further increases are forecast, but at a slower rate; numbers are expected to be up by about another 10 percent by 1980. By then, beef output is likely to be up by as much as 30 percent over 1971 due to more intensive production programs and feeding to heavier weights in feedlots.

### Estimated '73-74 U.S. Exports of Wheat, Feedgrains, Soybeans, Cotton

The Department of Agriculture on October 17 announced its latest forecast for U.S. exports in 1973-74 of wheat, feedgrains, soybeans and products, and cotton. Wheat and feedgrain exports are expected to be down and soybean exports up by 70 million bushels over last year's exports. Cotton exports will be up by 13 percent over last year's.

Wheat exports for 1973-74 are estimated at 1,150 million bushels, down slightly from 1,185 million last year, and feedgrains for 1973-74 at 39.7 million short tons, compared with 43.0 million short tons in 1972-73.

Feedgrain exports in million bushels break down to the following (1972-73 figures in parentheses): Corn 1,125 (1,250); grain sorghums 200 (215); barley 80 (66); and oats 40 (25).

Exports of soybeans and products for 1973-74 are estimated at (with 1972-73 exports in parentheses): Soybeans 550 million bushels (480 million); soybean meal 5.8 million short tons (4.8 million); and soybean oil 1.1 billion pounds (1.1 billion).

Cotton exports for 1973-74 are expected to be around 6.0 million bales (480 lb. bales), compared with 5.3 million bales in 1972-73.